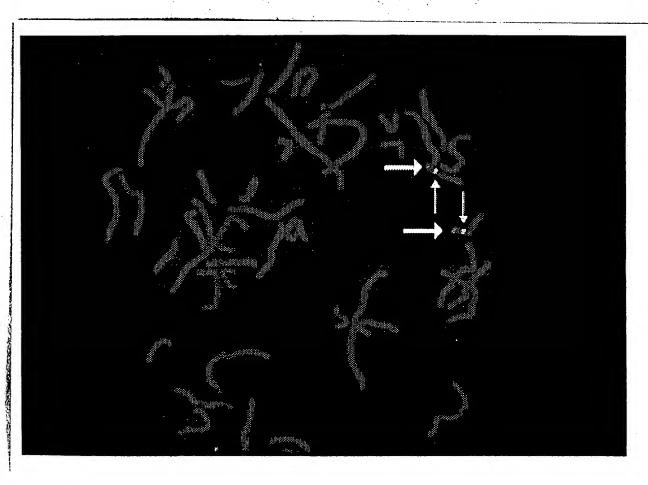


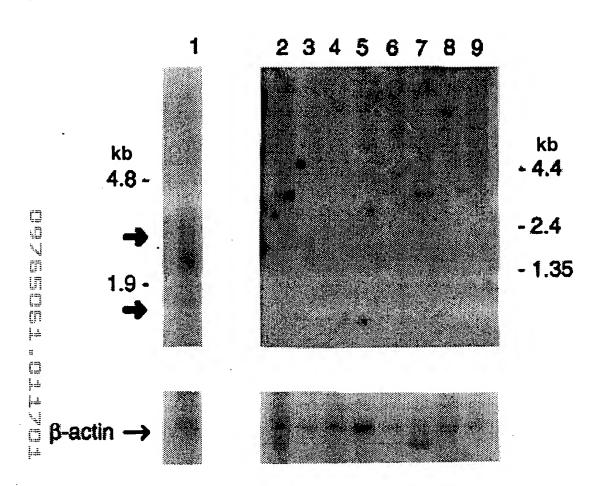
b

Human AIPL1	MDARTTIN	D0111111111111111111111111111111111111			
Rat AIPL1	- MDMMDDIMV	BGVKKTILHG	GTGELPNFIT	GSRVIFHFRT	MKCDEERTVI
Human AIP	· MIDITARIA	EGVKKTILHG	GTGELPNFIT	GSRVTFHFRT	MKCDEERTVI
Kouse AIP	MADITARLE	DGIQKRVIQE	GRGELPDFQD	GTKATFHYRT	LHSDDEGTVL
muse KIP	MADLIARLEE	DGIQKRVIQE	GRGELPDFQD		
	* *	• •	* **** *	* .**.**	* * **.
Human AIPL1	DD 00				100
Rat AIPL1	DDSKQVGQPM	HIIIGNMFKL	EVWEILLTSM	RVHEVAEFWC	DTIHTGVYPI
Human AIP	DDSKQVGQPM	NIIIGNMFKL	EVWETLLTSM	RLGEVAEFWC	DTIHTGVYPM
Mouse AIP	DDSKARGKPM	ELIIGKKFKL	PVWETIVCTM	REGEIAQFLC	DIKHVVLYPL
WOORS VIL	DUSRTRGKPM	ELIVGKKFKL	PVWETIVCTM		
	**** * **	*.* ***	***. *	* .* * * *	* * *
Human AIPL1				TPR I	
Rat AIPL1	LSKSLRQMAQ	GKDPTEWHVH	TCGLANMFAY	HTLGYEDLDE	LQKEPQPLVF
Human AIP	LSKSLRQVAE	GKDPTSWHVH	TCGLANMFAY	HTLGYEDLDE	LQKEPQPLIF
Mouse AIP	VAKSLRNIAV	GKDPLEGGRH	CCGVAQMREH	SSLGHADLDA	LQQNPQPLIF
WOORS WIL	VAKSLRNIAE	GKDPLEGGRH	CCGIAQMHEH	SSLGHADLDA	LQQNPQPLIF
	*** *	•••• . [•	** * *	** ***	** ****
Human AIPL1	[br . a.m				200
Rat AIPL1	VIELLOVDAP	SDYQRETWNL	SNHEKMKAVP	VLHGEGNRLF	KLGRYEEASS
Human AIP	LIELLQVEAP	NEYQRETWNL	NNEERMQAVP	LLHGEGNRLY	KLGRYDQAAT
Mouse AIP	HMEMLKVESP	GTYQQDPWAM	TDEEKAKAVP	LIHQEGNRLY	REGHVKEAAA
WOUNG WIL	HIEMLKVESP	GTYQQDPWAM	TDEEKAKAVP		REGOVKEAAA
		•• •	.****	* *****.	* .*.
Wilman ATDY 1		TPR	II	•	- •-•
Human AIPL1	KYOEAIICLR	TPR NLQTKEKPWE	II VOWLKLEKMI	NTLILNYCDC	LLKKEEYYEV
Rat AIPL1	KYQEAIICLR KYQEAIVCLR	TPR NLQTKEKPWE NLQTKEKPWE	II VQWLKLEKMI VEWLKLEKMI	NTLILNYCOC	LLKKEEYYEV
Rat AIPL1 Human AIP	KYCEATICLE KYCEATVCLE KYYDATACLK	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS	II VQWLKLEKMI VEWLKLEKMI PEWIQLDKQI	NTLILNYCOC NTLILNYCOC TPLLLNYCOC	LLKKEEYYEV KLVVEEYYEV
Rat AIPL1	KYCEAIICLR KYCEAIVCLR KYYDAIACLK KYYDAIACLK	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS	DDMIÖTDFÖI AEMIÖTDKÖI AEMIÖTDKÖI TI	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC	LLKKEEYYEV KLVVEEYYEV
Rat AIPL1 Human AIP	KYCEAIICLR KYCEAIVCLR KYYDAIACLK KYYDAIACLK	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS	VQWLKLEKMI VEWLKLEKMI PEWIQLDKQI PDWIQLDLOI	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC	LLKKEEYYEV KLVVEEYYEV
Rat AIPL1 Human AIP Mouse AIP	KYCEATICLR KYCEATVCLR KYYDATACLK KYYDATACLK	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS	VQWLKLEKMI VEWLKLEKMI PEWIQLDKQI PDWIQLDLQI	NTLILNYCDC NTLILNYCDC TPLLLNYCDC TPLLLNYCDC	LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV
Rat AIPL1 Human AIP Mouse AIP Human AIPL1	KYCEATICLE KYCEATICLE KYYDATACLK KYYDATACLK KYYDATACLK ** ** ***	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS *** ** ** HPGIVKAYYV	VQWLKLEKMI VEWLKLEKMI PEWIQLDKQI PDWIQLDLQI * * * * * * * * * * * * * * * * * * *	NTLILNYCDC NTLILNYCDC TPLLLNYCDC TPLLLNYCDC **********************************	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1	KYCEAIICLR KYCEAIVCLR KYYDAIACLK KYYDAIACLK ** ** ** LEHTSDILRH LEHTSDILRH	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS *** ** ** HPGIVKAYYV HPGIVKAYYM	VQWLKLEKMI VEWLKLEKMI PEWIQLDKQI PDWIQLDLQI * * * TPF RARAHAEVWN	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC TPLLLNYCOC E III EAEAKADLOK AEEAKADLOK	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV 300 VLELEPSMOK
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIP	KYCEAIICLR KYCEAIVCLR KYYDAIACLK KYYDAIACLK ** ** ** LEHTSDILRH LEHTSDILRH LDHCSSILNK	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS *** ** HPGIVKAYYV HPGIVKAYYW YDDNVKAYFK	VOWLKLEKMI VEWLKLEKMI PEWIQLDKQI PDWIQLDLQI * * * * * * * * * * * * * * * * * * *	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC TPLLLNYCOC TPLLLNYCOC TPLLLNYCOC TPLLLNYCOC AEEAKADLOK AEEAKADLOK AOEAOADFAK	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV 300 VLELEPSMOK VLELEPSMRK VLELEPSMRK
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1	KYCEAIICLR KYCEAIVCLR KYYDAIACLK KYYDAIACLK KYYDAIACLK LEHTSDILRH LEHTSDILRH LUHCSSILNK LDHCSSILNK	TPR NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS *** *** HPGIVKAYYV HPGIVKAYYV TODNVKAYFK	VOWLKLEKMI VEWLKLEKMI PEWIQLDKQI PDWIQLDLQI * * * * * * * * * * * * * * * * * * *	NTLILNYCOC NTLILNYCOC TPLLLNYCOC ***********************************	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV 300 VLELEPSMOK VLELEPSMRK VLELDPALAP VLELDPALAP
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIP	KYCEAIICLR KYCEAIVCLR KYYDAIACLK KYYDAIACLK ** ** ** LEHTSDILRH LEHTSDILRH LDHCSSILNK	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS *** ** HPGIVKAYYV HPGIVKAYYW YDDNVKAYFK	VOWLKLEKMI VEWLKLEKMI PEWIQLDKQI PDWIQLDLQI * * * * * * * * * * * * * * * * * * *	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC TPLLLNYCOC TPLLLNYCOC TPLLLNYCOC TPLLLNYCOC AEEAKADLOK AEEAKADLOK AOEAOADFAK	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV 300 VLELEPSMOK VLELEPSMRK VLELDPALAP VLELDPALAP
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIP Mouse AIP	KYCEAIICLR KYCEAIVCLR KYYDAIACLK KYYDAIACLK KYYDAIACLK LEHTSDILRH LEHTSDILRH LEHTSDILRH LDHCSSILNK LDHCSSILNK	NLQTKEKPWE NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS ***** HPGIVKAYYV HPGIVKAYYY YDDNVKAYFK YDDNVKAYFK	II VQMLKLEKMI VEWLKLEKMI PEWIQLDKQI PDWIQLDLQI RARAHAEVWN RGKAHAAVWN RGKAHAAVWN	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC R III EAEAKADLOK AEEAKADLOK AEEAKADLOK AQEAQADFAK AQEAQADFAK	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV 300 VLELEPSMQK VLELEPSMRK VLELDPAIAP VLELDPAIAP
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIP Mouse AIP Human AIPL1	KYCEATICLE KYCEATVCLE KYYDATACLK KYYDATACLK ** ** ** LEHTSDILEH LEHTSDILEH LEHTSDILEH LDHCSSILNK ** *** AVERELELLE	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS HPGIVKAYYV HPGIVKAYYW YDDNVKAYFK *****	UQULKLEKMI VQWLKLEKMI VEWLKLEKMI PEWIQLDKQI PDWIQLDLQI TPF RARAHAEVWN RARAHAEVWN RGKAHAAVWN RGKAHAAVWN RKARHAVWN	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC : TPLLLNYCOC : TPLLNYCOC : TP	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV 300 VLELEPSMQK VLELEPSMQK VLELDPAIAP VLELDPAIAP
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1	KYCEATICLE KYCEATVCLE KYYDAIACLK KYYDAIACLK ** ** *** LEHTSDILRH LEHTSDILRH LDHCSSILNK LOHCSSILNK ** *** AVRRELRLLE AVLRELRLLE	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS ***** HPGIVKAYYW HPGIVKAYYW HPGIVKAYFK **** NRMAEKQEEE SKLADKQEEE	VOMEKLEKMI VOMEKLEKMI VOMEKLEKMI PEWIQLDKQI PDWIQLDLQI * * * * * * * * * * * * * * * * * * *	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC ***********************************	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV 300 VLELEPSMQK VLELEPSMQK VLELDPAIAP VLELDPAIAP
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Rat AIPL1 Rat AIPL1 Human AIPL1	KYCEAIICLE KYCEAIVCLE KYYDAIACLK KYYDAIACLK ** ** ** LEHTSDILRH LEHTSDILRH LDHCSSILNK LDHCSSILNK ** ** AVRRELRLLE VVSRELRALE	NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS *** ** HPGIVKAYYV HPGIVKAYYW YDDNVKAYFK YDDNVKAYFK **** NRMAEQEEE ARIROKQEEE ARIROKDEED	VOMEKLEKMI VEMLKLEKMI VEMLKLEKMI PEMIOLDKQI PDWIQLDLQI * TPF RARAHAEVWN RARAHAEVWN RGKAHAAVWN RGKAHAAVWN RGKAHAAVWN RCRCRNMLSQ RQRCRSMLG KARFRGIFSH	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC TELLAYCOC TIII EAEAKADLOK AEEAKADLOK AGEAQADFAK AGEAQADFAK AGEAQADFAK TORROW TORROW	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV 300 VLELEPSMQK VLELEPSMQK VLELDPAIAP VLELDPAIAP
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1	KYCEATICLE KYCEATVCLE KYYDAIACLK KYYDAIACLK ** *** LEHTSDILRH LEHTSDILRH LEHTSDILRH LDHCSSILNK LDHCSSILNK ** *** AVRELELLE AVLRELELLE VVSRELRALE VVSRELRALE	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS ***** HPGIVKAYYV HPGIVKAYYK YDDNVKAYFK YDDNVKAYFK **** NRMAEKQEEE SRLADKQEEE ARIRQKDEED TRIRQKDEED	UQULKLEKMI VQWLKLEKMI PEWIQLDKQI PDWIQLDLQI TFF RARAHAEVWN RARAHAEVWN RGKAHAAVWN RGKAHAAVWN RCKAHAAVWN RCKAHAGUN RCRCRSMLG RCRCRSMLG KARFRGIFSH KARFRGIFSH	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC TELLAYCOC TIII EAEAKADLOK AEEAKADLOK AGEAQADFAK AGEAQADFAK AGEAQADFAK TORROW TORROW	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV 300 VLELEPSMQK VLELEPSMQK VLELDPAIAP VLELDPAIAP
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Rat AIPL1 Rat AIPL1 Human AIPL1	KYCEATICLE KYCEATVCLE KYYDAIACLK KYYDAIACLK ** *** LEHTSDILRH LEHTSDILRH LEHTSDILRH LDHCSSILNK LDHCSSILNK ** *** AVRELELLE AVLRELELLE VVSRELRALE VVSRELRALE	NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS *** ** HPGIVKAYYV HPGIVKAYYW YDDNVKAYFK YDDNVKAYFK **** NRMAEQEEE ARIROKQEEE ARIROKDEED	VOMEKLEKMI VEMLKLEKMI VEMLKLEKMI PEMIOLDKQI PDWIQLDLQI * TPF RARAHAEVWN RARAHAEVWN RGKAHAAVWN RGKAHAAVWN RGKAHAAVWN RCRCRNMLSQ RQRCRSMLG KARFRGIFSH	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC TELLAYCOC TIII EAEAKADLOK AEEAKADLOK AGEAQADFAK AGEAQADFAK AGEAQADFAK TORROW TORROW	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV 300 VLELEPSMQK VLELEPSMQK VLELDPAIAP VLELDPAIAP
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Rat AIPL1 Rat AIPL1 Rouse AIP	KYCEATICLE KYCEATVCLE KYYDAIACLK KYYDAIACLK ** ** *** LEHTSDILRH LEHTSDILRH LDHCSSILNK . * *** AVRRELRLLE AVLRELRLLE VVSRELRALE ***** ***	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS ***** HPGIVKAYYV HPGIVKAYYM YDDNVKAYFK YDDNVKAYFK **** NRMAEKQEEE ARIRQKDEED TRIRQKDEED	VOMEKLEKMI VOMEKLEKMI VOMEKLEKMI PEWIQLDKQI PDWIQLDLQI * * * * * * * * * * * * * * * * * * *	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC E III EAEAKADLOK AEEAKADLOK AQEAQADFAK AQEAQADFAK AQEAQADFAK GATOPPAEPP	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV 300 VLELEPSMQK VLELEPSMQK VLELDPAIAP VLELDPAIAP
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIPL1 Rat AIPL1 Human AIPL1 Human AIP	KYCEAIICLE KYCEAIVCLE KYYDAIACLK KYYDAIACLK ** ** ** LEHTSDILRH LEHTSDILRH LEHTSDILRH LDHCSSILNK LDHCSSILNK ** ** AVRRELRLLE VVSRELRALE **** PPAEPPTAPS	NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS *** ** HPGIVKAYYV HPGIVKAYYM YDDNVKAYFK YDDNVKAYFK *** NRMAEKQEEE SKLADKQEEE ARIRQKDEED TRIRQKDEED *** AELSAGPPAE	VQMKLEKMI VQMKLEKMI PEWIQLDKQI PDWIQLDLQI * * * * * * * * * * * * * * * * * * *	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC E III EAEAKADLOK ACEAK	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV 300 VLELEPSMQK VLELEPSMQK VLELDPAIAP VLELDPAIAP
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIPL1 Rat AIPL1 Human AIPL1 Rat AIPL1 Human AIPL1 Rat AIPL1 Rat AIPL1	KYCEATICLE KYCEATICLE KYCEATICLE KYYDATACLK KYYDATACLK ** *** LEHTSDILRH LEHTSDILRH LEHTSDILRH LDHCSSILNK LDHCSSILNK *** AVRRELRLLE AVLRELRLLE VVSRELRALE ***** PPAEPPTAPS	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NRMAEKQEEE SRLADKQEEE SRLADKQEEE ARIRQKDEED TRIRQKDEED TRIRQKDEED ARIRQKEEA	VOMEKLEKMI VOMEKLEKMI VOMEKLEKMI PEWIQLDKQI PDWIQLDLQI * * * * * * * * * * * * * * * * * * *	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC E III EAEAKADLOK ACEAK	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV 300 VLELEPSMQK VLELEPSMQK VLELDPAIAP VLELDPAIAP
Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIP Mouse AIP Human AIPL1 Rat AIPL1 Human AIPL1 Rat AIPL1 Human AIPL1 Human AIP	KYCEATICLE KYCEATICLE KYYDAIACLK KYYDAIACLK ** *** LEHTSDILRH LEHTSDILRH LEHTSDILRH LDHCSSILNK LDHCSSILNK *** AVRRELRLLE AVLRELRLLE VVSRELRALE VVSRELRALE *** PPAEPPTAPS	TPR NLQTKEKPWE NLQTKEKPWE NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NLQMKEQPGS NRMAEKQEEE SRLADKQEEE SRLADKQEEE ARIRQKDEED TRIRQKDEED TRIRQKDEED ARIRQKEEA	VQMKLEKMI VQMKLEKMI PEWIQLDKQI PDWIQLDLQI * * * * * * * * * * * * * * * * * * *	NTLILNYCOC NTLILNYCOC TPLLLNYCOC TPLLLNYCOC E III EAEAKADLOK ACEAK	LLKKEEYYEV LLKKEEYYEV KLVVEEYYEV KLVAQEYYEV 300 VLELEPSMQK VLELEPSMQK VLELDPAIAP VLELDPAIAP

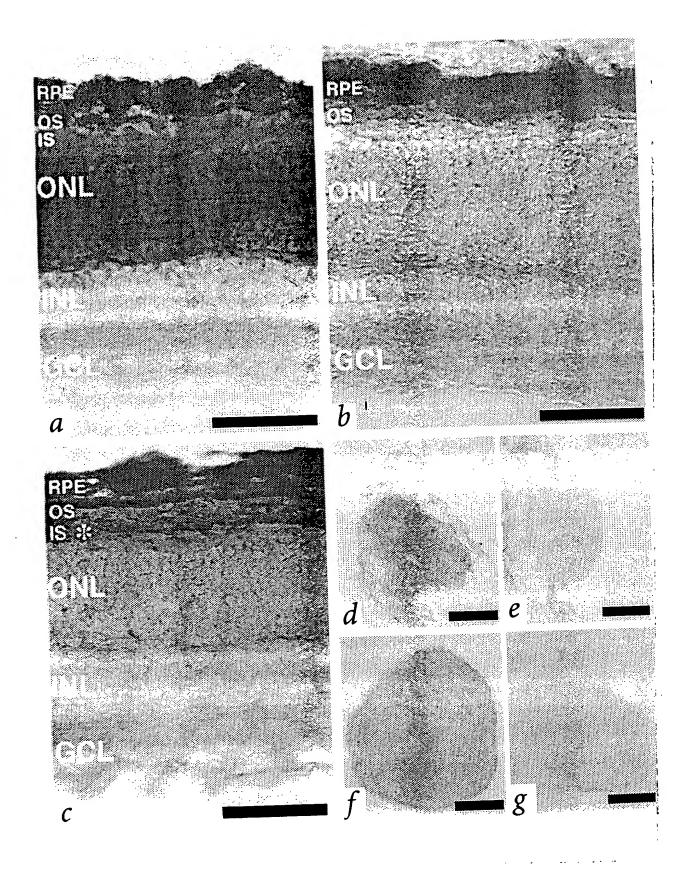
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F14.2

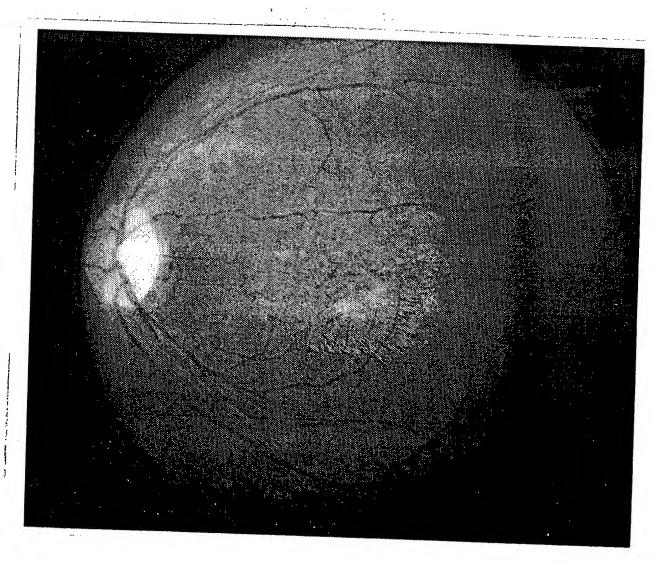


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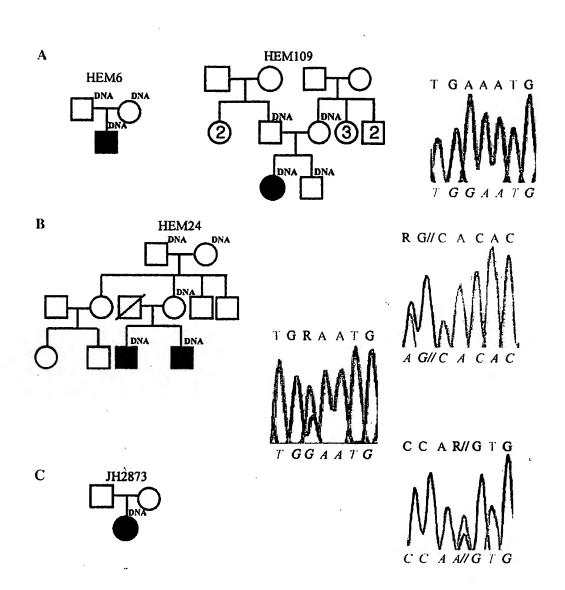


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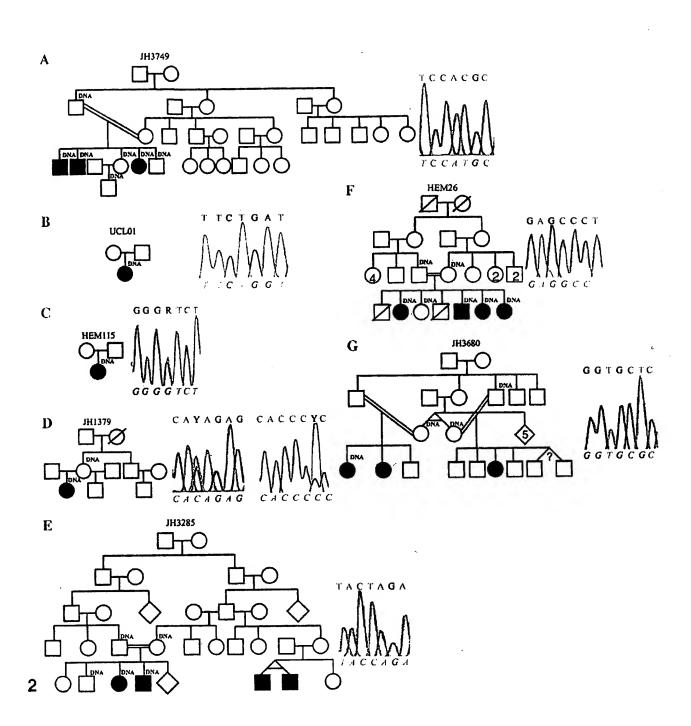
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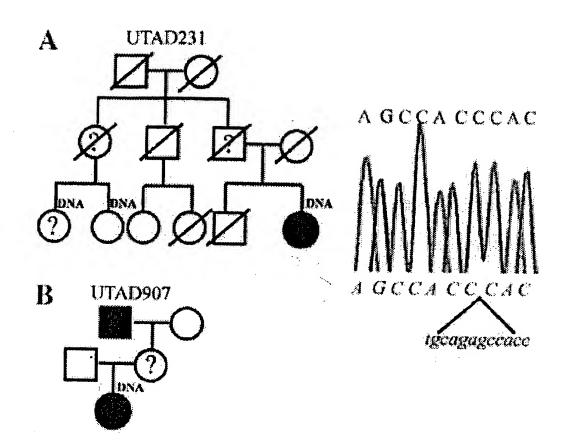
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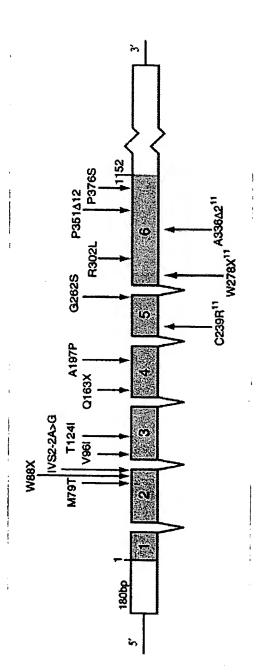
F14.7



F16.8



F16,9



K/6,10